



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0455; Project Identifier 2018-SW-031-AD; Amendment 39-21699; AD 2021-17-16]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Leonardo S.p.a. Model AW189 helicopters. This AD was prompted by fatigue testing and analyses. This AD requires establishing a life limit for a certain part-numbered tail gearbox fitting. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0455; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any comments received, and other information.

The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Kristi Bradley, Program Manager, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email kristin.bradley@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Leonardo S.p.a. Model AW189 helicopters. The NPRM published in the *Federal Register* on June 10, 2021 (86 FR 30822). In the NPRM, the FAA proposed to require determining the total hours time-in-service (TIS) and total number of landings of tail gearbox fitting part number (P/N) 4F5350A04152. If the total hours TIS and total number of landings cannot be determined, the NPRM would require removing the part from service. Also, the NPRM would establish a life limit for tail gearbox fitting P/N 4F5350A04152 and require removing the part from service according to the new life limit. The NPRM was prompted by EASA AD 2018-0087, dated April 18, 2018 (EASA AD 2018-0087), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Leonardo S.p.A. Helicopters (formerly Finmeccanica S.p.A., AgustaWestland S.p.A.) Model AW189 helicopters. EASA advises of revisions resulting in Leonardo AW189 Maintenance Manual, Document 89-A-AMPI-00-P, Chapter IV, Airworthiness Limitations, Issue 13 (89-A-AMPI-00-P ALS Issue 13), which includes new and/or more restrictive airworthiness limitations and maintenance tasks since its original issuance. Failure to accomplish those airworthiness limitations and maintenance tasks could result in an unsafe condition. This condition, if not addressed, could result in failure of a part, which could result in loss of control of the helicopter.

Accordingly, EASA AD 2018-0087 requires accomplishing the actions specified in 89-A-AMPI-00-P ALS Issue 13 and revising the Aircraft Maintenance Program (AMP) with the actions specified in 89-A-AMPI-00-P ALS Issue 13.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. This AD is adopted as proposed in the NPRM.

Related Service Information

The FAA reviewed AW189 Air Vehicle Maintenance Planning Information, 89-B-AMPI-00-P, Chapter 4, Issue 6, dated July 17, 2018 (89-B-AMPI-00-P ALS Issue 6). 89-B-AMPI-00-P ALS Issue 6 specifies various airworthiness limitations information including retirement lives, mandatory inspections, and certification maintenance requirements. 89-B-AMPI-00-P ALS Issue 6 is equivalent to 89-A-AMPI-00-P ALS Issue 13.

Differences Between this AD and the EASA AD

EASA AD 2018-0087 applies to Model AW189 helicopters, whereas this AD applies to that model helicopter with tail gearbox fitting P/N 4F5350A04152 installed instead. EASA AD 2018-0087 requires accomplishing the actions specified in 89-A-AMPI-00-P ALS Issue 13 and revising the AMP with the actions specified in 89-A-AMPI-00-P ALS Issue 13, whereas this AD requires establishing a life limit for tail gearbox fitting P/N 4F5350A04152 and removing that part from service accordingly instead.

Costs of Compliance

The FAA estimates that this AD affects 4 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Replacing a tail gearbox fitting takes about 48 work-hours and parts cost about \$30,000 for an estimated cost of \$34,080 per helicopter and \$136,320 for the U.S. fleet, per replacement cycle.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-17-16 Leonardo S.p.a.: Amendment 39-21699; Docket No. FAA-2021-0455; Project Identifier 2018-SW-031-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Leonardo S.p.a. Model AW189 helicopters, certificated in any category, with tail gearbox fitting part number (P/N) 4F5350A04152 installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6520, Tail Rotor Gearbox.

(e) Unsafe Condition

This AD was prompted by fatigue testing and analyses. The FAA is issuing this AD to prevent parts from remaining in service beyond their fatigue life. The unsafe condition, if not addressed, could result in failure of a part, which could result in loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Before further flight after the effective date of this AD:

(1) Determine the total hours time-in-service (TIS) and total number of landings of tail gearbox fitting P/N 4F5350A04152. For purposes of this AD, a landing is counted anytime a helicopter lifts off into the air and then lands again regardless of the duration of the landing and regardless of whether the engine is shutdown. If the total hours TIS and total number of landings cannot be determined, before further flight, remove the part from service.

(2) Remove any part from service that has reached or exceeded its life limit as follows. Thereafter, remove any part from service on or before reaching its life limit as follows. Tail gearbox fitting P/N 4F5350A04152: 14,600 total hours TIS or 57,300 total landings, whichever occurs first.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Kristi Bradley, Program Manager, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email kristin.bradley@faa.gov.

(2) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2018-0087, dated April 18, 2018. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket

No. FAA-2021-0455.

(j) Material Incorporated by Reference

None.

Issued on August 13, 2021.

Lance T. Gant, Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

[FR Doc. 2021-17841 Filed: 8/19/2021 8:45 am; Publication Date: 8/20/2021]